

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for modulating the inflammatory response of a mesenchymal cell comprising administering use of an effective amount of an agent that can modulate an IgA receptor on a mesenchymal cell to a cell or animal in need thereof for the manufacture of a medicament to modulate the inflammatory responses of a mesenchymal cell.
2. (Currently amended) A method use according to claim 1 to inhibit the inflammatory responses of a mesenchymal cell.
3. (Currently amended) A method use according to claim 2 to treat an inflammatory condition caused by an IgA binding to an IgA receptor on a mesenchymal cell.
4. (Currently amended) A method use according to claim 3 wherein the inflammatory condition is arthritis.
5. (Currently amended) A method use according to claim 4 wherein the arthritides is selected from rheumatoid arthritis, osteoarthritis or a spondyloarthropathy.
6. (Currently amended) A method use according to claim 3 wherein the inflammatory condition is selected from Crohn's disease, ulcerative colitis, Behcet's disease, Sjogren's disease and a vasculitis.
7. (Currently amended) A method use according to claim 3 wherein the condition is asthma, chronic bronchitis, acute bronchitis, bronchial hyperreactivity, chronic obstructive pulmonary disease, emphysema, interstitial lung disease, bronchiectasis or airway remodelling.

8. (Currently amended) A method for modulating cytosolic calcium signalling in a mesenchymal cell comprising administering use of an effective amount of an agent in the manufacture of a medicament that can modulate an IgA receptor on a mesenchymal cell to a cell or animal in need thereof to modulate cytosolic calcium signalling in a mesenchymal cell.

9. (Currently amended) A method use according to claim 8 comprising administering an effective amount of an IgA receptor antagonist to prevent or inhibit intracellular calcium signalling in a mesenchymal cell.

10. (Currently amended) A method for inhibiting the contraction of a mesenchymal cell comprising administering use of an effective amount of an IgA receptor antagonist to a cell or animal in need thereof in the manufacture of a medicament to inhibit the contraction of a mesenchymal cell.

11. (Currently amended) A method for inhibiting the production of inflammatory mediators or growth factors comprising administering use of an effective amount of an IgA receptor antagonist to a cell or animal in need thereof in the manufacture of a medicament to inhibit the production of inflammatory mediators or growth factors.

12. (Currently amended) A method use according to any one of claims claim 1 to 11 wherein the IgA receptor is pIgR or Fc α R.

13. (Currently amended) A method use according to any one of claims claim 2 to 12 wherein the IgA receptor antagonist inhibits the binding of pIgA to pIgR.

14. (Currently amended) A method use according to any one of claims claim 2 to 12 wherein the IgA receptor antagonist inhibits the binding of pIgA to Fc α R.

15. (Currently amended) A method ~~use~~ according to ~~any one of claims~~ claim 2 to 14 wherein the IgA receptor antagonist is a scFv that binds plgR or Fc α R.

16. (Currently amended) A method ~~use~~ according to ~~any one of claims~~ claim 1 to 15 wherein the mesenchymal cell is a smooth muscle cell.

17. (Currently amended) A method ~~use~~ according to claim 16 wherein the cell is an airway smooth muscle cell.

18. (Currently amended) A method ~~use~~ according to ~~any one of claims~~ claim 1 to 15 wherein the mesenchymal cell is a fibroblast.

19. (Currently amended) A method ~~use~~ according to claim 18 wherein the cell is a synovial fibroblast.

20. (Original) A method of delivering a substance to a mesenchymal cell comprising administering to an animal or cell in need thereof an effective amount of a conjugate comprising the substance coupled to an IgA receptor ligand.

21. (Original) A method according to claim 20 wherein the IgA receptor is plgR or Fc α R.

22. (Currently amended) A method according to claim 20 ~~or 21~~ wherein the mesenchymal cell is a fibroblast or smooth muscle cell.

23. (Original) A method of detecting a condition associated with the activation of a mesenchymal IgA receptor on a mesenchymal cell comprising assaying a tissue sample or cells from the sample for (a) a nucleic acid molecule encoding an IgA receptor or a fragment thereof or (b) an IgA receptor or a fragment thereof.

24. (Original) A method according to claim 23 wherein the IgA receptor is plgR or

Fc α R.

25. (Currently amended) A method according to claim 23 or 24 wherein the condition is an inflammatory condition selected from arthritides, including rheumatoid arthritis, osteoarthritis, spondyloarthropathies, Crohn's disease, ulcerative colitis, Behcet's disease, Sjogren's disease and vasculitides.

26. (Currently amended) A method according to claim 23 or 24 wherein the condition is asthma, chronic bronchitis, acute bronchitis, bronchial hyperreactivity, chronic obstructive pulmonary disease, emphysema, interstitial lung disease, bronchiectasis or airway remodelling.

27. (Original) A method of detecting IgA mediated bronchial hyperreactivity comprising:

- (a) administering an IgA receptor agonist to a patient; and
- (b) detecting bronchoconstriction in the patient wherein an increase in bronchoconstriction as compared to a control indicates that the patient has IgA-mediated hyperreactivity.

28. (Original) A method according to claim 27 wherein bronchoconstriction is measured by listening for wheezing on chest auscultation.

29. (Original) A method according to claim 27 wherein bronchoconstriction is measured by measuring a reduced forced expiratory volume at 1 second (FEV1).

30. (Original) A method of detecting IgA-mediated bronchial hyperreactivity comprising:

- (a) administering an IgA-receptor agonist to a patient and detecting bronchoconstriction; and
- (b) administering an IgA receptor agonist followed by a non-specific bronchoconstricting agent to the patient and detecting bronchoconstriction at a lower

dose than when the nonspecific agent is administered alone wherein bronchoconstriction in step (a) and/or bronchoconstriction induced at a lower dose of the nonspecific agent administered without the IgA receptor agonist in step (b) would indicate that the patient has IgA-mediated bronchial hyperreactivity.

31. (Original) A method according to claim 30 wherein the non-specific bronchoconstricting agent is methacholine or histamine.

32. (Currently amended) A method according to claim 30 ~~or 31~~ wherein bronchoconstriction is detected with a pulmonary function test such as clinical spirometry [=measurement of FEV1 and FVC].